Work Order ID 101079 *101079* Page 1 April-30-13 2:39:43 PM Item ID: D3937-041 Accept *N900040100* Setup Start **Revision ID:** Stop Item Name: Luminescent Strip Assembly **Start Qty: 32.00 Start Date:** 4/30/13 **Cust Item ID:** Required Date: 4/30/13 Req'd Qty: 32.00 **Customer:** Reference: Run Process Plan: MLJ Date: 13-05-01 Tooling: Date: Approvals: Stop QC: Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ **Tool ID** Tool # Plan Accept Reject Reject Insp. **Work Center ID** Description Code Qty Qty Number Stamp **Run Hours** Draw Nbr **Revision Nbr** D3937 В 0.00 100 32 9 FF *100* Shear 0.00 Memo 1-Cut as per Dwg D3937 (Make D3937-3) Shear Dwg Rev: Rev 2-Deburr if necessary 110 QC2- Inspect parts off machine FAI/FAIB 0.00 QC Memo Quality Control 120 QC8- Inspect parts second check *120* QC 0.00 Memo Quality Control 110 Oc 5

NCR: Ye	es / No				WORK ORDER NON-	CONF	ORN	JANCE / UP	DATE			***
										QA Closed:	Date:	υ
Work Order					DISPOSITION	_			AGAINST DE	PARTMENT		
Part No	D				Rework Scrap Use-as-is	 	1	Skid-tube Machining noforming	Crosstube Small Fab Finishing	-d .	Water Jet d. Eng. Coor re/Packaging	Engineering Quality Other
NCR No	D				Work Order ⊍pdate			Large Fab	Composite		Supplier	
Root				Descri	ption of work order update	Init	tial	Act	ion	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Chief	f Eng	Descr	ription .	Date	Verification	QC Inspector
Doc/Data												
quip/Tooling												
Operator												
Material												
Setup								•				
Other												
Process		3.										,
Supplier	<i>=</i>	2.0										
Training												
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Landing	g Gear				General					, -		
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	Centre No	t Conce	ntric to	o/s	BOM/Route	На	ardwa	re		Over/Under	tolerance	Temperature/Cure
	Cracks				Broken/Damaged	[]in:	specti	on Incomplete		Part Incorrec	it	Weld
· [Crushed/	Crimped			Burrs	In:	structi	ions incomplete/l	Jnclear	Part Lost/Mi	ssing	Wrong Stock Pulled
	Cuffs	-			Contamination	М	lainte	ńance		Part Moved		
Γ	Heat Trea	it ·			Countersink	М	lislabe	led		Positioned V	Vrong	_
	Inspection	n Strip in	Tube		Cut Too Short	М	lisread			Power Loss/	Surge	Other
	Ripples in	£ *			Drill Holes	По	ffset			- 	:	
	Torque W	/aves in l	Extrusio	n 🛴	Drawing		ut of C	alibration				
T	Turning S	equence	, ·		Finish	По	ut of S	equence				
	Wave/Tw	ist in Tul	ре		Folio -	Πo	utside	Dimensions	18 B			

DQA:

Date:

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Work Ord April-30-13 2:		01079		*101079*								Page 2
Item ID: Revision ID: Item Name:	D3937-041	t Strip Assembly		Accept	*N900	040	100)*	Setup	Start Stop	1 71	S1*
Start Date: Required Date Reference:	4/30/13	Start Qty: 32.00 Req'd Qty: 32.00	*32* *32*		Cust Item II Customer:	D :					''IVI	
Approvals:	Process P	lan:	Date:	Tooling: SPC (Y/N):	Da Da				Run	Start Stop	*N *N	R1* R2*
Sequence ID/ Work Center 130 *120* HandFinish	ID	Operation Description Chemical Conversion Con	at per QSI005 4.1	Set Up/ Run Hours 0.00	Tool ID	Tool#	Plan Code	Accept Qty	Qty		Reject Number	Insp. Stamp
140 *140* QC Quality Control		QC3- Inspect Part Finish Memo		0.00				3 3	<u>}</u>		<i>\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ </i>)3/06/o

150

150 Small Fab

Memo

0.00

0.00

Small Fab

1- Align part edges and stick strip to D3937-3 as per dwg

N/CD+	Yes /	No	WORK	ORDER NO	N-CONF
NCK:	res /	NO	WORK	OUDER MO	IN-COINT

Date:	~
	Date:

NCR: Y	es /	No			WORK ORDER NON-	CON	IFORI	MANCE / UP	DATE	QA Closed:	Date:	,
					DISPOSITION				AGAINST DI			
Work Orde	r:				DISPOSITION	_			_	-		
Part N					Rework Scrap Use-as-is			Skid-tube Machining noforming	Crosstube Small Fab Finishing	⊣	Water Jet od. Eng. Coor. re/Packaging	Engineering Quality Other
NCR N	o				Work Order Update	┚┃		Large Fab	Composite	_	Supplier	
Root				Descri	ption of work order update	T I	nitial	Ac	tion	Sign &		
Cause	Di	te Step	Qty		or Non-conformance	Ch	ief Eng	Desc	ription	Date	Verification	QC Inspector
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Equip/Tooling	_			[•			1				
Operator	4											
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Supplier Training	-											
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опарргочец				<u>. </u>	F	AUL	T CATE	GORY			·	<u> </u>
Landin	g Gear			٠	General			<u> </u>				
ſ	Ben	ling			Bend		Grain			Ovalized		Pressure/Forced
	Cent	re Not Conce	entric to	o/s	BOM/Route	П	Hardwa	are		Over/Under	tolerance	Temperature/Cure
	Crac	ks	•		Broken/Damaged	П	Inspect	ion Incomplete		Part Incorre	ct	Weld
	Crus	hed/Crimped	t	Γ	Burrs		Instruc	tions Incomplete/	Unclear	Part Lost/M	issing	Wrong Stock Pulled
	Cuff	5			Contamination		Mainte	enance		Part Moved		
1	Hea	Treat			Countersink		Mislab	eled		Positioned \	Wrong	_
Ţ	Insp	ection Strip i	n Tube		Cut Too Short		Misrea	d		Power Loss/	/Surge	Other
	Ripp	les in Bend			Drill Holes		Offset					
	Tord	ue Waves in	Extrusio	n 🗌	Drawing		Out of	Calibration				·
	Turr	ing Sequenc	e		Finish		Out of	Sequence				
	Wav	e/Twist in Tu	ıbe		Folio		Outside	Dimensions				

Work Order ID 101079 *101079* Page 3 April-30-13 2:39:43 PM D3937-041 Accept *N900040100* Setup Start **Revision ID:** Luminescent Strip Assembly Item Name: **Start Oty: 32.00 Start Date:** 4/30/13 **Cust Item ID:** Req'd Qty: 32.00 Required Date: 4/30/13. **Customer:** Reference: Run Process Plan: Date: _____ Tooling: Approvals: Date: Stop QC: Date: _____ SPC (Y/N): Date: **Tool ID** Tool # Plan Sequence ID/ **Operation** Reject Reject Set Up/ Accept Insp. Qty **Work Center ID** Description Code Number Stamp **Run Hours** Qty QC5- Inspect part completeness to step on W/O 160 0.00 *160* OC Memo Quality Control Identify as per dwg & Stock Location 170 *170* Packaging 0.00 Memo Packaging

QC21- Final Inspection - Work Order Release

120

OC

Quality Control

MLJ 13-06-05

Item ID:

180

0.00

Memo

0.00

NCR:	Yes	/	No

Date:

NCR: Y	es	/ No				WORK ORDER NON-	CON	FORN	MANCE / UP	DATE			
					,						QA Closed:	Date	:
Work Orde	r:					DISPOSITION				AGAINST DE	PARTMENT	PROCESS	
	·· –					Rework	7		Skid-tube	Crosstube	1	Water Jet	Engineering
Part N	ο.					Scrap	1		Machining	Small Fab	Pro	d. Eng. Coor.	Quality
	_					Use-as-is	┪ ┃		noforming	Finishing	4	e/Packaging	Other
NCR N	ο.		•			Work Order Update	1		Large Fab	Composite	1	Supplier	
	_					\ \ _	-		• Ш		-	·	
Root		T.			Descri	ption of work order update	In	nitial	Act	tion	Sign &		
Cause		Date	Step	Qty	1	or Non-conformance	Chi	ef Eng	Desc	ription	Date	Verification	QC Inspector
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quip/Tooling							ļ						
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		_				, F	AULT	CATE	GORY				
Landin	g Ge	ear				General	_			_	-		_
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		Centre No	t Concer	ntric to (o/s	BOM/Route		Hardwa	re		Over/Under	tolerance	Temperature/Cure
[\Box	Cracks				Broken/Damaged		inspecti	on Incomplete		Part Incorred	it _	Weld
		Crushed/C	Crimped			Burrs		Instruct	ions Incomplete/	Unclear	Part Lost/Mi	ssing	Wrong Stock Pulled
		Cuffs				Contamination	'	Mainte	nance		Part Moved		
	I	Heat Trea	t			Countersink		Mislabe	led		Positioned V	Vrong	- -
Ī]i	Inspection	n Strip in	Tube		Cut Too Short		Misread	I		Power Loss/	Surge	Other
	F	Ripples in	Bend			Drill Holes		Offset					
	1	Torque W	aves in E	xtrusio	ո [Drawing		Out of C	Calibration	\$			
	7	Turning Se	equence			Finish		Out of S	Sequence				
	\neg	Wave/Twi	ist in Tub	e		Folio	\Box	Outside	Dimensions				

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April-30-13 2:39:42 PM

Work Order ID:

101079

Parent Item:

D3937-041

Parent Item Name:

Luminescent Strip Assembly

Start Date: 4/30/13

Required Date: 4/30/13

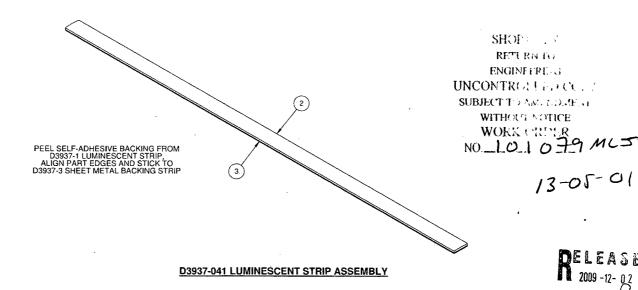
Start Qty: 32.00

Required Qty: 32.00

Comments:	IPP RevA: New iss	ue DD verified by:	EC								<i>i</i>		
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3937-1 Luminescent Strip		Manufactured	No				Each	19.0000		32	5	F13.	.06.04
				-	00603	<u>Loc Otv</u> 19	Lo	oc Code		32			
					3537 4531	3 16							
M6061T6S.032 6061-T6 Sheet 0.032"		Purchased	No	,-	_	100	sf	977.7700	0.09099	3.0649248	F	FI	-05-2
				Location		Loc Oty	<u>L</u> c	oc Code		00			,
			Ø.	MAT021 /	20285	977.77			1.0	9188			
			•		21099	171.94							
				13	22256	46.78							
				1.	22737	44.8					-		
				11	23097	71.9							
					23135	37.7							
					23137	51.85							
					23293	58.5							
					23483	260.6			10	7/070			
				\ <u>~</u>	23701.	47.85			100	7'0/7			
					24629	71.85							
				1.	25341	114		•					

											DQA:	Date	e:
NCR: Y	es	/ No				WORK ORDER NON-	CO	NFORM	MANCE / UPDAT	ΓE	QA Closed:	Date	e:
Work Orde	r:					DISPOSITION				AGAINST DE	PARTMENT/	PROCESS	
Part N	lo			11		Rework Scrap Use-as-is Work Order Update		Therm	Machining S	Crosstube Small Fab Finishing omposite	i	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root Cause		Date	Step	Qty		iption of work order update or Non-conformance		nitial ief Eng	Action Description	on	Sign & Date	Verification	QC Inspector
oc/Data quip/Tooling perator Material etup other rocess upplier raining													
				_			AUL	T CATE	GORY				
Landir		Bending Centre No Cracks Crushed/C Cuffs Heat Trea Inspection Ripples in Torque W Turning So	Crimped t n Strip in Bend Vaves in E	Tube		General Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes Drawing Finish		Instruct Mainte Mislabe Misread Offset Out of O	on Incomplete ions Incomplete/Uncle enance eled	ear	Ovalized Over/Under Part Incorrec Part Lost/Mi Part Moved Positioned W Power Loss/S	ssing [Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
		Wave/Tw			 	Folio		1	Dimensions				

ITEM	QTY -041	P/N	DESCRIPTION
1.	Х	D3937-041	LUMINESCENT STRIP ASSEMBLY .
2	1	D3937-1	LUMINESCENT STRIP
. 3	. 1	D3937-3	SHEET METAL BACKING STRIP



8	C5 19.5	DIM WAS 21.0	T LENGTH WAS 21.0. SHEET 3 ZONE XCESSIVE WASTE.	AJS	09.11.27
Α	NEW IS:	SUE		AB	09.06.02
REV.			DESCRIPTION	BY	DATE
DESIG	N	A	DART AEROSPA	CEL	TD
DRAW	N	AJS	HAWKESBURY, ONTARI		
CHECH	ŒD	A	DRAWING NO.		REV. B
MFG. A	PPR.	14	7 D3937		SHEET 1 OF 3
APPRO	OVED	NP.	TITLE		SCALE
DE API	PR.		LUMINESCENT STRI	Р	NTS
DATE	09.1	1.27	COPYRIGHT © 2009 BY DART A THIS COCUMENT IS FREVETE AND COMPEDITION UND IS SUPPLIED NOT TO BE USED FOR MY PURPOSE ON COMPEDITION COMMUNICATIONS.	TED TO ANY OT	S CONDITION THAT IT IS

NOTES:
1) MATERIAL: N/A
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: N/A
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3937-041" USING FINE POINT PERMANENT INK MARKER
7) WEIGHT: 0.06 lbs

SPECIFICATION CONTROL DRAWING

D3937-1 LUMINESCENT STRIP

DART PART NUMBER	LENGTH	WIDTH "W"	THICKNESS	SUPPLIER	SUPPLIER PART NUMBER	WEIGHT
D3937-1	19.5	0.67	0.09	LUFTHANSA TECHNIK	PL88-990LH00	0.04 LB\$

B

С

RELEASED 2009-12-08 2

	DESIGN 6	E .	DART AEROSPACE LTD	
NOTES:	DRAWN A	s	HAWKESBURY, ONTARIO, CANADA	
1) MATERIAL: SEE TABLE 2) FINISH: N/A	CHECKED	4	DRAWING NO. REV. B	
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED	MFG. APPR.	Δ_{α}	D3937 SHEET 2 OF 3	
4) UNITS: INCHES UNLESS OTHERWISE NOTED	APPROVED /	4/1	TITLE SCALE	
5) BREAK SHARP EDGES: N/A 6) IDENTIFICATION: N/A	DE APPR.	#	LUMINESCENT STRIP NTS	
7) WEIGHT: SEE TABLE	DATE 09.11.27	7	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT OF PRIVATE AND CONFERENCE SUPPLIED ON THE EMPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PREVIOUS OR COMPANION TO TO ANY OTHER PERSON WITHOUT	

